

Phase 2 Soil Fumigant Requirements



Summary of 2011/12
label requirements

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2011/2012 Label Requirements

- **Buffer Zones**
- **Emergency Preparedness**
- **Registrant Requirements**

Buffer Zone distances

- Labels will display distances in tables based on
 - application rate
 - application block size
 - application equipment & methods
- Buffer zone “credits”
 - Earned for certain site conditions
 - soil type, temperature, organic matter
 - application practices that reduce emissions

Buffer zone credits

Condition		% Reduction			
		MeBr	Chloropicrin	Metam	Dazomet
Use of high barrier tarp		30 or 60	30 or 60	15 or 30	NA
Organic matter content	> 1% -2%	10	10	10	10
	> 2% -3%	20	20	20	20
	> 3%	30	30	30	30
Clay content > 27%		10	10	10	10
Soil Temp	≤ 50 F (center pivot and shank)	NA	10	20	NA
	> 50-70 F (center pivot and shank)	NA	NA	10	NA
	> 50-70 F (drip irrigation, flood irrigation, and rotary tiller and spray blade applications)	NA	NA	10	NA
Symmetry application system, high barrier tarp, <100 lb ai/A		NA	40 or 70	NA	NA
Potassium thiosulfate seal with water applied over tarp		15	15	NA	NA
Water seal applied over tarp		NA	10	NA	NA
Max reduction		80	80	80	40

Buffer zones

Can include:

- **Ag areas owned/operated by another person**
 - Written agreement that nobody will enter BZ
 - No overlapping buffers
- **Residential areas**
 - Written agreement that they voluntarily vacate
 - Air monitoring required for M-B with $<20\%$ pic



Buffer zones

Can include:

– Publicly owned/operated areas

- Written permission from state/local authority responsible for management and operation
- Area unoccupied, non-handlers prohibited



– Roads & Rights of Way

- No permission required
- If a road has a sidewalk, written permission is required and pedestrians are prohibited.



Transit through Buffer Zones



Allowed:

- vehicles and bikes traveling on public and private roads through a buffer zone



Prohibited:

- pedestrians
- bus stops or other locations where people wait for public transit



Note: If a road has a sidewalk, written permission to include the road is required and pedestrians are prohibited.

Buffer zone posting requirements

- Posted at **usual** points of entry
 - roads, sidewalks, walking paths, bike trails
- Along **likely** routes of approach
- Prior to start of application and remain until end of buffer zone period
- Removed 3 days after end of bz period
- Will be available at **points of sale**
- Does not replace treated area sign already used for Fumigants



Emergency preparedness

- If occupied structures are in close proximity to a buffer zone, the Certified Applicator must either:

- Conduct “Fumigant Site Monitoring” (use senses or air monitors)

OR

- Provide “Response Information for Neighbors”

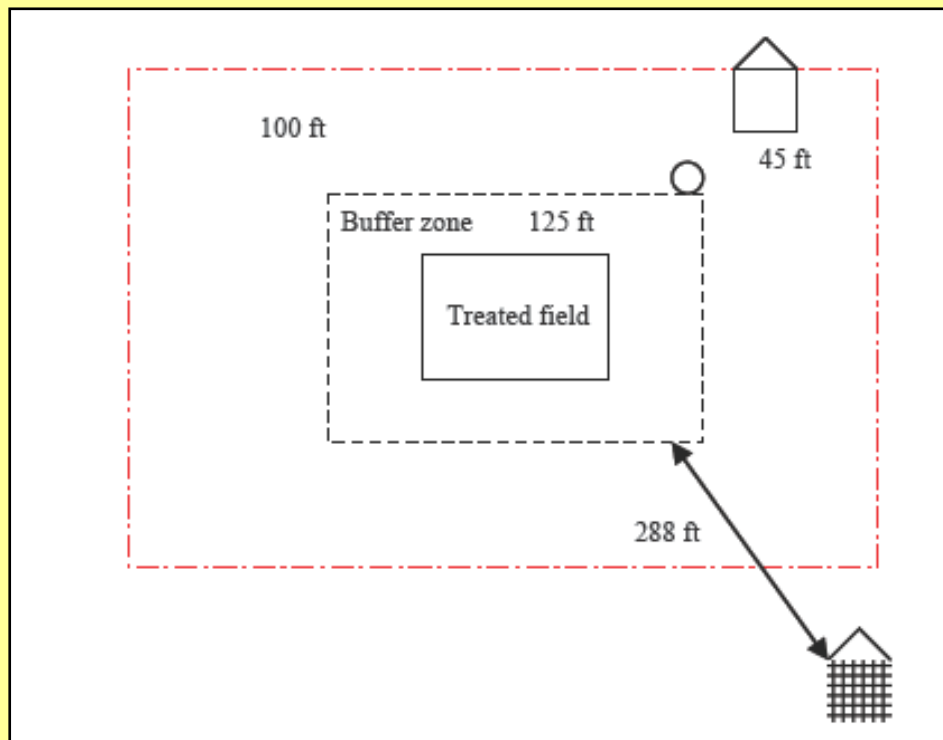


**Site-specific proximity triggers for
buffer zones > 25 feet:**

If the buffer zone is:	AND there are residences and businesses:
> 25 feet and ≤ to 100 feet	50 feet from the edge of the buffer zone
> 100 feet and ≤ 200 feet	100 feet from the edge of the buffer zone
> 200 feet and ≤ 300 feet	200 feet from the edge of the buffer zone
> 300 feet	300 feet from the edge of the buffer zone

**Applicator must either: monitor the air (Option 1) or
provide information to neighbors (Option 2)**

Example Site Map - Emergency Preparedness & Response Measures



➡ If buffer zone is 125 feet, requirement applies to residences within 100 feet of buffer zone

➡ Applicator has option to monitor the air in the area between the plain house and the buffer zone, or give residents of the plain house information

➡ Cross-hatched house is outside of buffer zone, no action required

Option 1: Buffer zone Monitoring

- Use **senses or air monitors** between the buffer zone and structures within 50 to 300 ft
 - dawn, dusk, once at night, once during day for 48 hour duration
- If concentrations exceed action levels or sensory irritation occurs, **then emergency response plan must be implemented**
- EPA evaluating alternate sampling schemes
 - timing and devices

Option 2: Neighborhood notification

- Applicators provide **emergency response information** to neighbors
- Information **includes**:
 - location of the application block
 - fumigant name and EPA Registration #
 - applicator and property owner/operator contact information
 - expected time period for the fumigation and buffer
 - early signs and symptoms of exposure and what to do if exposure is suspected (call 911 in most cases)
 - how to find additional information about fumigants



Difficult to evacuate sites

EPA has defined *difficult-to-evacuate sites* as:

- schools (preschool-12)
- state licensed daycare centers
- nursing homes
- assisted living facilities
- hospitals
- in-patient clinics
- prisons

If occupied during the application or within 36 hrs after the application, then applications are prohibited within $\frac{1}{4}$ or $\frac{1}{8}$ of a mile (depending on size of buffer zone).

Registrant Requirements

2010/11

1. Provide Fumigant **Safe Handler information**

2011/12

1. Provide **information** for **first responders**
2. Provide **community outreach** programs
4. Develop and provide **training for Certified Applicators** in charge of a fumigant application
 - Will be EPA approved training
 - Registrants will issue cards and maintain dbase
 - State certification may be used in lieu of Registrant training.



For More Information

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